### BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA

In the matter of the amendment) NOTICE OF PUBLIC HEARING ON of ARM 17.30.1303, 17.30.1304,) 17.30.1310, 17.30.1322, 17.30.1330, 17.30.1341 and 17.30.1343 pertaining to concentrated animal feeding operations (CAFOs) and adoption of Department Circular DEQ 9 (Montana Technical Standards for CAFOs))

PROPOSED AMENDMENT

(WATER QUALITY)

#### TO: All Concerned Persons

- On January 14, 2005, at 8:30 a.m., the Board of Environmental Review will hold a public hearing in Room 111, Metcalf Building, 1520 Sixth Avenue, Helena, Montana, consider the proposed amendment of the above-stated rules.
- The Board will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact the Board no later than 5:00~p.m., January 3, 2005, to advise us of the nature of the accommodation that you need. Please contact the Board Secretary at P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2544; fax (406) 444-4386; or email ber@state.mt.us.
- The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:
- 17.30.1303 INCORPORATIONS BY REFERENCE (1) and (2) remain the same.
- (3) Where the department has adopted a federal regulation or statute by reference, the following shall apply:
- (a) References references in the federal regulations to "administrator", "regional administrator", "director", or "US environmental protection agency", or the like, should be read to mean "department"-;
- (b) Where where the department incorporates by reference a subpart of a federal regulation, both the subpart and its constituent sections and subsections are also incorporated by reference.
- (4) All of the incorporations by reference of federal agency regulations listed in the table in (7) of this rule shall refer to federal agency regulations as they have been codified in the July 1, 1991, edition of Title 33 and 40 of the Code of Federal Regulations (CFR), unless another codification date is specified in this rule.
  - (5) and (6) remain the same.
  - The list of incorporations by reference follows:

<u>ARM 17.30...</u> <u>33 CFR ...</u>

Description of Regulation

(a) through (i) remain the same.

<u>ARM 17.30...</u> <u>40 CFR ...</u>

(j) 1330 Appendix B of Part 122 Part 412 (July 1, 2003 edition)

Criteria for determining whether a facility or operation merits classification as a concentrated Concentrated animal feeding operation (CAFO) point source category effluent limitations and quidelines.

(k) through (at) remain the same.

AUTH: 75-5-304, MCA

IMP: 75-5-304, 75-5-401, MCA

<u>REASON:</u> On February 12, 2003, the United States Environmental Protection Agency (EPA) published revisions to the federal Clean Water Act regulations pertaining to concentrated animal feeding operations (CAFOs). These rules updated EPA's 1976 CAFO regulations and became effective on April 14, 2003.

The Board of Environmental Review has adopted the 1976 CAFO regulations by reference in ARM 17.30.1303. Under EPA's revised rules, states with delegated permitting programs are required to revise their rules to reflect the revised federal regulations. The amendment to ARM 17.30.1303 noted above incorporates by reference the revised federal effluent limitations and guidelines for CAFOs. With the exception of the incorporation by reference in (7), this rule proposal will adopt the revised federal rules and will codify them in the ARM.

The revised effluent limitations and guidelines incorporated by reference continue to prohibit the discharge of manure and other process wastewater pollutants from existing sources, except for allowing the discharge of process wastewater whenever precipitation events cause an overflow from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff and direct precipitation from a 25-year, 24-hour rainfall event.

The revised effluent limitations and guidelines include several changes, however. New source performance standards for large swine, poultry, and veal calf CAFOs have been established. These standards prohibit the discharge of manure and other process wastewater pollutants except under the provisions of an upset or bypass, and specify that a facility must be properly designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff and direct precipitation from a 100-year, 24-hour rainfall event.

Certain flexibilities have been included in this revised rule. Large dairy cow and cattle other than veal calf CAFOs are

allowed to request a voluntary alternative performance standard. Large swine, poultry, and veal calf CAFOs may request a voluntary superior environmental performance standard. These alternative standards set forth a process to allow CAFOs to treat and discharge process-generated wastewater, rather than contain it.

Additionally, best management practices for the land application of manure, litter, and process wastewater and additional measures including visual inspections, installation of depth markers in all open surface liquid impoundments, corrective actions, mortality handling, and recordkeeping requirements have been established for large dairy cow, cattle, swine, poultry, and veal calf CAFOs. The effluent guidelines are based on the degree of control that can be economically achieved using various levels of pollution control technology. EPA conducted an extensive economic analysis of each animal sector in developing these effluent limitation guidelines.

EPA determined that these changes to the CAFO effluent limitations and guidelines were necessary in order to protect water quality. In 1998, EPA and the United States Department of Agriculture (USDA) jointly developed a unified national strategy to minimize the water quality and public health impacts of animal feeding operations. This unified national strategy identified seven issues to address in order to resolve these concerns. These issues include: developing and implementing comprehensive nutrient management plans; accelerating voluntary, incentive-based programs; implementing and improving the existing regulatory program; coordinating research, technical innovation, compliance assistance, and technology transfer; encouraging industry leadership; increasing data coordination; and establishing better performance measures and greater accountability. The revised regulations are based on this unified strategy to protect water quality and public health.

- 17.30.1304 DEFINITIONS In this subchapter, the following terms have the meanings or interpretations indicated below and shall be used in conjunction with and are supplemental to those definitions contained in 75-5-103, MCA.
  - (1) and (2) remain the same.
- (3)(a) "Animal feeding operation (AFO)" means a lot or facility, (other than an aquatic animal production facility), where the following conditions are met:
  - (i) and (ii) remain the same.
- (b) Two or more animal feeding operations under common ownership are considered, for the purposes of these rules determining the number of animals at an operation, to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.
  - (4) through (63) remain the same.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

<u>REASON:</u> This amendment to ARM 17.30.1304 is necessary in order to provide clarification about how the rules address operations with common ownership and to conform to the language that is used in the revised federal regulations.

- <u>17.30.1310 EXCLUSIONS</u> (1) The following discharges do not require MPDES permits:
- (1) through (3) remain the same, but are renumbered (a) through (c).
- $\frac{(4)}{(d)}$  Any introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations  $\underline{(CAFOs)}$  as defined in ARM  $\underline{17.30.1330}$ , discharges from concentrated aquatic animal production facilities as defined in ARM  $\underline{17.30.1304(5)}$ , discharges to aquaculture projects as defined in ARM  $\underline{17.30.1304(5)}$ , and discharges from silvicultural point sources as defined in ARM  $\underline{17.30.1304(5)}$ .
- (5) through (7) remain the same, but are renumbered (e) through (g).

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

REASON: The definition of concentrated animal feeding operations will be moved to a different rule of the ARM. This amendment is necessary in order to reference the new rule. The proposed renumbering of the rule is necessary to meet Secretary of State formatting standards.

- 17.30.1322 APPLICATION FOR A PERMIT (1) Any person who discharges or proposes to discharge pollutants and who does not have an effective permit, except persons covered by general permits under ARM 17.30.1341, excluded under ARM 17.30.1310, or a user of a privately owned treatment works unless the department requires otherwise under ARM 17.30.1344, shall submit a complete application, (which must include a BMP program if necessary under 40 CFR 125.102), to the department in accordance with this rule and ARM 17.30.1364, and 17.30.1365, 17.30.1370 through 17.30.1379, and 17.30.1383. All concentrated animal feeding operations (CAFOs) shall seek coverage under an MPDES permit as described in ARM 17.30.1330(5).
  - (2) through (6)(1) remain the same.
- (7) Existing manufacturing, commercial, mining, and silvicultural dischargers applying for MPDES permits shall provide the following information to the department, using application forms provided by the department:
  - (a) remains the same.
- (b) a line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification

- under (7)(c) below. The water balance must show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined (for example, for certain mining activities), the applicant may provide instead a pictorial description of the nature and amount of any sources of water and any collection and treatment measures;
  - (c) remains the same.
- (d) if any of the discharges described in (7)(c) above are intermittent or seasonal, a description of the frequency, duration, and flow rate of each discharge occurrence, (except) for storm water runoff, spillage, or leaks;
  - (e) and (f) remain the same.
- information on the discharge of pollutants specified in this subsection. When "quantitative data" for a pollutant are required, the applicant must shall collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. analytical method is approved, the applicant may use any suitable method but must shall provide a description of the method. When an applicant has 2 two or more outfalls with substantially identical effluents, the department may allow the applicant to test only + one outfall and report that the quantitative data also apply to the substantially identical outfalls. The requirements in  $(7)(q)(iii)(A)_{7}$  and  $(B)_{7}$  and (iv)below that an applicant must shall provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must shall report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, 24-hour composite samples must be used. However, a minimum of ± one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours, and a minimum of + one to 4 four grab samples may be taken for storm water discharges depending on the duration of the discharge. One grab sample must be taken in the first hour (or less) of discharge with 1 one additional grab sample taken in each succeeding hour of discharge up to a minimum of 4 four grab samples for discharges lasting 4 four or more hours. addition, the department may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of 4 four grab samples will be a representative sample of the effluent being discharged. An applicant is expected to "know or have reason to believe" that a pollutant is present in an effluent based on an evaluation of the expected use, production, or manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.
  - (i)(A) through (8)(d)(i)(K) remain the same.
- (ii) The department may waive the testing and reporting requirements for any of the pollutants or flow listed in

- (8)(d)(i) above if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.
- (iii) If the applicant is a new discharger, he <u>must shall</u> complete forms provided by the department by providing quantitative data in accordance with <u>(8)</u>(d) <del>above</del> no later than two years after commencement of discharge. However, the applicant need not complete those portions of the forms requiring tests which he has already performed and reported under the discharge monitoring requirements of his MPDES permit.
- (iv) The requirements of (8)(d)(i) and (iii) above, that an applicant must shall provide quantitative data or estimates of certain pollutants, do not apply to pollutants present in a discharge solely as a result of their presence in intake water. However, an applicant must shall report such pollutants as present. Net credit may be provided for the presence of pollutants in intake water if the requirements of ARM 17.30.1345(9) are met.
  - (e) through (h) remain the same.
- (9) New and existing concentrated animal feeding operations CAFOs, (defined in ARM 17.30.1304(3)) 17.30.1330, and concentrated aquatic animal production facilities, (defined in ARM 17.30.1304(6)), shall provide the following information to the department, using the application form provided by the department:
  - (a) for concentrated animal feeding operations <u>CAFOs</u>:
  - (i) name of the owner or operator;
  - (ii) facility location and mailing addresses;
- (ii) specific information about the type and number of animals, whether in open confinement and or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);
- (iv) the total number of acres used for confinement feeding; and the total number of acres under control of the applicant available for land application of manure, litter, or process wastewater;
  - (iii) remains the same, but is renumbered (v).
- (vi) latitude and longitude of the production area (entrance to production area);
- (vii) a topographic map of the geographic area in which the concentrated animal feeding operation is located showing the specific location of the production area and land application area, in lieu of the requirements of (6)(g);
- (viii) the type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage (tons/gallons);
- (ix) estimated amounts of manure, litter, and process wastewater generated per year (tons/gallons);

- (x) estimated amounts of manure, litter, and process
  wastewater transferred to other persons per year (tons/gallons);
  and
- (xi) for CAFOs that must seek coverage under a permit after December 31, 2006, certification that a nutrient management plan as specified in ARM 17.30.1343 has been completed and will be implemented upon the date of permit coverage;
  - (b) through (17)(i) remain the same.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

REASON: Under the 1976 CAFO regulations, a permit is not required for CAFOs that do not discharge except in the event of a 25-year, 24-hour rainfall event. However, EPA determined that the 25-year, 24-hour storm event permit exemption included in the 1976 CAFO regulations has created confusion and ambiguity that undermines the ability of the permitting authorities to effectively implement the CAFO regulations. The revised federal regulations, therefore, eliminate the 25-year, 24-hour rainfall event permit exemption and specify that all CAFOs have a mandatory duty to apply for an NPDES permit. Eliminating the permit exemption is necessary to ensure that all CAFOs will be appropriately permitted and that waste control facilities are properly designed, constructed, operated, and maintained to meet the applicable effluent limitations. The proposed amendment of (1) is necessary to reflect the revised federal regulations requiring permit coverage for all CAFOs and to effectively implement the CAFO regulations.

The revised federal regulations also specify specific information that must be included in any permit application submitted by a CAFO. The proposed amendment of (9) incorporates the required information stated in the revised federal regulations. The new data elements in the permit application are necessary to correspond with the new CAFO rule requirements, including land application information.

"Must" is changed to "shall" in several places throughout this rule. These are nonsubstantive amendments, which are necessary to standardize the terms used for mandatory requirements in administrative rules.

- 17.30.1330 CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOS) (2) (1) Concentrated animal feeding operations are point sources subject to the that require MPDES permits program for discharges or potential discharges. Once an operation is defined as a CAFO, the MPDES requirements for CAFOs apply with respect to all animals in confinement at the operation and all manure, litter, and process wastewater generated by those animals or the production of those animals, regardless of the type of animal.
- (2) In this rule, the following terms have the meanings indicated below:

- (1) (a) "Concentrated animal feeding operation (CAFO)" means an animal feeding operation (AFO), as defined in ARM 17.30.1304(3), that is defined as a large or as a medium CAFO under this rule, or that is designated as a CAFO which meets the criteria in Appendix B of 40 CFR Part 122, or which by the department designates under (3) of this rule.
- (b) "Land application area" means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied.
- (c) "Large concentrated animal feeding operation (large CAFO)" means an AFO that stables or confines as many as or more than the number of animals specified in any of the following categories:
  - (i) 700 mature dairy cows, whether milked or dry;
  - (ii) 1,000 veal calves;
- (iii) 1,000 cattle other than mature dairy cows or veal calves. "Cattle" includes, but is not limited to, heifers, steers, bulls, and cow/calf pairs;
  - (iv) 2,500 swine each weighing 55 pounds or more;
  - (v) 10,000 swine each weighing less than 55 pounds;
  - (vi) 500 horses;
  - (vii) 10,000 sheep or lambs;
  - (viii) 55,000 turkeys;
- (ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
- (x) 125,000 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;
- (xi) 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
- (xii) 30,000 ducks, if the AFO uses other than a liquid manure handling system;
- (xiii) 5,000 ducks, if the AFO uses a liquid manure handling system.
- (d) "Manure" includes manure, bedding, compost, and raw materials or other materials commingled with manure or set aside for disposal.
- (e) "Medium concentrated animal feeding operation" (medium CAFO) means any AFO with the type and number of animals that fall within any of the ranges listed in (2)(e)(i) and which has been defined or designated as a CAFO. An AFO is a medium CAFO if:
- (i) the type and number of animals that it stables or confines falls within any of the following ranges:
  - (A) 200 to 699 mature dairy cows, whether milked or dry;
  - (B) 300 to 999 veal calves;
- (C) 300 to 999 cattle other than mature dairy cows or veal calves. "Cattle" includes, but is not limited to, heifers, steers, bulls, and cow/calf pairs;
  - (D) 750 to 2,499 swine each weighing 55 pounds or more;

- (E) 3,000 to 9,999 swine each weighing less than 55 pounds;
  - (F) 150 to 499 horses;
  - (G) 3,000 to 9,999 sheep or lambs;
  - (H) 16,500 to 54,999 turkeys;
- (I) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
- (J) 37,500 to 124,999 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;
- (K) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
- (L) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system; or
- (M) 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system; and
  - (ii) one of the following conditions are met:
- (A) pollutants are discharged into state waters through a man-made ditch, flushing system, or other similar man-made device; or
- (B) pollutants are discharged directly into state waters which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
- (f) "Process wastewater" means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.
- "Production area" means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes, but is not limited to, lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed silos, silage bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of "production area" is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

- (h) "Small concentrated animal feeding operation" (small CAFO) means an AFO that is designated as a CAFO and is not a medium CAFO.
- (3) On a case-by-case basis, the department may designate any animal feeding operation as a concentrated animal feeding operation CAFO upon determining that it is a significant contributor of pollution pollutants to state waters. In making this designation the department shall consider the following factors:
  - (a) through (c) remain the same.
- (d) the slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes, manure, and process waste waters into state waters; and
  - (e) remains the same.
- (4) No animal feeding operation <u>may be designated under this rule unless the department has conducted an on-site inspection of the operation and determined that the operation should and could be regulated under the permit program. In addition, no animal feeding operation with less than the numbers of animals set forth in Appendix B of 40 CFR Part 122 less than those established in (2)(e)(i) may be designated as a concentrated animal feeding operation CAFO unless:</u>
  - (a) and (b) remain the same.
- (5) A permit application is not required from a concentrated animal feeding operation designated under this rule until the department has conducted an on site inspection of the operation and determined that the operation should and could be regulated under the permit program.
- (6) The board hereby adopts and incorporates herein Appendix B of 40 CFR Part 122 which is an appendix to a federal agency rule setting forth criteria for determining whether a facility or operation merits classification as a concentrated animal feeding operation. See ARM 17.30.1303 for complete information about all materials incorporated by reference.
- (5) All CAFO owners or operators shall seek coverage under an MPDES permit, except as provided in (5)(a). Specifically, the CAFO owner or operator shall either apply for an individual MPDES permit or submit an application for coverage under an MPDES CAFO general permit. A facility seeking coverage under a CAFO general discharge permit issued in accordance with ARM 17.30.1341 shall include the information specified in ARM 17.30.1322(6)(a) through (f) and (9), including a topographic map. If the department has not made a general permit available to the CAFO, the CAFO owner or operator shall submit an application for an individual permit to the department.
- (a) An owner or operator of a large CAFO does not need to seek coverage under an MPDES permit otherwise required by this rule if the owner or operator has received from the department notification of a determination under (7) that the CAFO has no potential to discharge manure, litter, or process wastewater.
- (b) A permit application for an individual permit or application for coverage under a general permit must include the information specified in ARM 17.30.1322(6)(a) through (f) and (9), including a topographic map.

- (6) Land application discharges from a CAFO are subject to MPDES requirements. The discharge of manure, litter, or process wastewater to state waters from a CAFO as a result of the application of that manure, litter, or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to MPDES permit requirements, except where it is an agricultural storm water discharge as provided in ARM 17.30.1304(41). For purposes of this rule, where the manure, litter, or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in ARM 17.30.1343(1)(c)(i)(F) through (I), a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO is an agricultural storm water discharge.
- (7) The department will make "no potential to discharge" determinations for large CAFOs as follows:
- (a) The department may, upon request, make a case-specific determination that a large CAFO has no potential to discharge pollutants to state waters. In making this determination, the department shall consider the potential for discharges from both the production area and any land application areas. The department shall also consider any record of prior discharges by the CAFO. In no case may the CAFO be determined to have no potential to discharge if it has had a discharge within the five years prior to the date of the request submitted under this section. For purposes of this rule, the term "no potential to discharge" means that there is no potential for any CAFO manure, litter, or process wastewater to be added to state waters under any circumstance or climatic condition. A determination that there is "no potential to discharge" for purposes of this section relates only to discharges of manure, litter, and process wastewater covered by this rule.
- (b) In requesting a determination of "no potential to discharge," the CAFO owner or operator shall submit any information that would support such a determination, within the time frame provided by the department and in accordance with (8) and (9). Such information must include all of the information specified in ARM 17.30.1322(6)(a) through (f) and (9)(a)(i) through (xi). The department has discretion to require additional information to supplement the request, and may also gather additional information through on-site inspection of the CAFO.
- (c) Before making a final decision to grant a "no potential to discharge" determination, the department shall issue a notice to the public stating that a "no potential to discharge" request has been received. This notice must be accompanied by a fact sheet that includes, when applicable: a brief description of the type of facility or activity that is the subject of the "no potential to discharge" determination; a brief summary of the factual basis, upon which the request is based, for granting the "no potential to discharge" determination; and a description of the procedures for reaching

- a final decision on the "no potential to discharge" determination. The department shall base the decision to grant a "no potential to discharge" determination on the administrative record, which includes all information submitted in support of a "no potential to discharge" determination and any other supporting data gathered by the department. The department shall notify any CAFO seeking a "no potential to discharge" determination of its final determination within 90 days of receiving the request.
- (d) The owner or operator shall request a "no potential to discharge" determination by the applicable permit application date specified in (8). If the department's final decision is to deny the "no potential to discharge" determination, the owner or operator shall seek coverage under a permit within 30 days after the denial.
- (e) The "no potential to discharge" determination does not relieve the CAFO from the consequences of an actual discharge. Any unpermitted CAFO that discharges pollutants into state waters is in violation of the Montana Water Quality Act even if it has received a "no potential to discharge" determination from the department. Any CAFO that has received a determination of "no potential to discharge," but that anticipated changes in circumstances that could create the potential for a discharge, should contact the department and apply for and obtain permit authorization prior to the change of circumstances.
- (f) Where the department has issued a determination of "no potential to discharge," the department retains the authority to subsequently require MPDES permit coverage if circumstances at the facility change, if new information becomes available, or if there is another reason for the department to determine that the CAFO has a potential to discharge.
- (8) The following operations shall seek coverage under the MPDES permit program:
- (a) operations defined as CAFOs prior to April 14, 2003. For operations that are defined as CAFOs under regulations that are in effect prior to April 14, 2003, the owner or operator shall have or seek to obtain coverage under an MPDES permit as of April 14, 2003, and comply with all applicable MPDES requirements, including the duty to maintain permit coverage in accordance with (9);
- (b) operations defined as CAFOs as of April 14, 2003, which were not defined as CAFOs prior to that date. For all CAFOs, the owner or operator of the CAFO shall seek to obtain coverage under an MPDES permit by a date specified by the department, but no later than February 13, 2006;
- (c) operations that become defined as CAFOs after April 14, 2003, but which are not new sources. For newly constructed AFOs and AFOs that make changes to their operations that result in becoming defined as CAFOs for the first time after April 14, 2003, but are not new sources, the owner or operator shall seek to obtain coverage under an MPDES permit, as follows:
- (i) for newly constructed operations not subject to effluent limitations guidelines, 180 days prior to the time the CAFO commences operation; or

- (ii) for other operations (e.g., resulting from an increase in the number of animals) as soon as possible, but no later than 90 days after becoming defined as a CAFO, except that, if an operational change that makes the operation a CAFO would not have made it a CAFO prior to April 14, 2003, the operation has until April 13, 2006, or 90 days after becoming defined as a CAFO, whichever is later;
- (d) new sources. New sources shall seek to obtain coverage under a permit at least 180 days prior to the time that the CAFO commences operation;
- (e) operations that are designated as CAFOs. For operations designated as a CAFO in accordance with (3), the owner or operator shall seek to obtain coverage under a permit no later than 90 days after receiving notice of the designation;
- (f) notwithstanding any other provision of this section, a CAFO that has received a "no potential to discharge" determination in accordance with (7) is not required to seek coverage under an MPDES permit that would otherwise be required by this rule. If circumstances materially change at a CAFO that has received a "no potential to discharge" determination, such that the CAFO has a potential for a discharge, the CAFO has a duty to immediately notify the department, and seek coverage under an MPDES permit within 30 days after the change in circumstances.
- (9) No later than 180 days before the expiration of the permit, the permittee shall submit an application to renew its permit in accordance with ARM 17.30.1322. However, the permittee need not continue to seek continued permit coverage or reapply for a permit if:
- (a) the facility has ceased operation or is no longer a CAFO; and
- (b) the permittee has demonstrated to the satisfaction of the department that there is no remaining potential for a discharge of manure, litter, or associated process wastewater that was generated while the operation was a CAFO or during the closure process, other than agricultural storm water from land application areas.
- (10) The permittee shall comply with the effluent standards and limitations as set forth in 40 CFR Part 412.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

REASON: The above changes adopt the CAFO permit requirements as listed in the revised federal regulations. These rules describe: requirements for CAFOs to obtain permit coverage; applicable definitions; the process for designating an animal feeding operation as a CAFO; who must seek coverage under an MPDES permit; requirements for land application discharges from CAFOs; process and deadlines for a "no potential to discharge" determination; deadlines for a CAFO to seek MPDES permit coverage; and the duty to maintain permit coverage. These revised federal requirements allow the CAFO program to be fully implemented by requiring all CAFOs to obtain a permit

unless a "no potential to discharge" determination is made; defining CAFOs based on the number of animals confined and/or discharges to state waters; clarifying when discharges from land application areas are considered to be agricultural storm water discharges exempt from MPDES requirements; and establishing deadlines for CAFOs to seek and maintain permit coverage. These regulations allow the state to complement the EPA/USDA unified strategy to protect water quality and public health.

- 17.30.1341 GENERAL PERMITS (1) The department may issue general permits for the following categories of point sources which the board has determined are appropriate for general permitting under the criteria listed in 40 CFR 122.28 as stated in ARM 17.30.1105:
  - (a) through (f) remain the same.
- (g) <u>concentrated</u> animal <u>feedlots</u> <u>feeding operations</u> (CAFOs);
  - (h) through (12)(e) remain the same.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

REASON: This amendment is proposed in order to clarify that general permits may be issued for the CAFO point source category and to conform to the language that is used in the revised federal regulations.

- 17.30.1343 ADDITIONAL CONDITIONS APPLICABLE TO SPECIFIC CATEGORIES OF MPDES PERMITS (1) The following conditions, in addition to those set forth in ARM 17.30.1342, apply to all MPDES permits within the categories specified below:
  - (1) remains the same, but is renumbered (a).
  - (a) remains the same, but is renumbered (i).
- (i) through (iv) remain the same, but are renumbered (A) through (D).
  - (b) remains the same, but is renumbered (ii).
- (i) through (iv) remain the same, but are renumbered (A) through (D).
  - (2) remains the same, but is renumbered (b).
- (a) through (c) remain the same, but are renumbered (i) through (iii).
- (i) and (ii) remain the same, but are renumbered (A) and (B).
- (c) All permits issued to concentrated animal feeding operations (CAFOs), in addition to meeting those requirements set forth in ARM 17.30.1322, 17.30.1330, 17.30.1341 and 17.30.1342 must include:
- (i) requirements to develop and implement a nutrient management plan. At a minimum, a nutrient management plan must include best management practices and procedures necessary to implement applicable effluent limitations and standards. Permitted CAFOs must have their nutrient management plans developed and implemented by December 31, 2006. CAFOs that seek to obtain coverage under a permit after December 31, 2006, must

- have a nutrient management plan developed and implemented upon the date of permit coverage. The nutrient management plan must, to the extent applicable:
- (A) ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;
- (B) ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;
- (C) ensure that clean water is diverted, as appropriate, from the production area;
- (D) prevent direct contact of confined animals with state waters;
- (E) ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;
- (F) identify appropriate site specific conservation practices to be implemented, including, as appropriate, buffers or equivalent practices, to control runoff of pollutants to state waters;
- (G) identify protocols for appropriate testing of manure, litter, process wastewater, and soil;
- (H) establish protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater; and
- (I) identify specific records that will be maintained to document the implementation and management of the minimum elements described in (1)(c)(i)(A) through (H);
- (ii) recordkeeping requirements. The permittee shall create, maintain for a period of five years, and make available to the department, upon request, the following records:
- (A) all applicable records identified pursuant to (1)(c)(i)(I);
- (B) all CAFOs subject to 40 CFR Part 412 must comply with recordkeeping requirements as specified in 40 CFR 412.37(b) and (c), 412.47(b) and (c), and department Circular DEQ 9; and
- (C) a copy of the CAFO's site-specific nutrient management plan must be maintained on-site and made available to the department upon request;
- (iii) requirements relating to transfer of manure or process wastewater to other persons. Prior to transferring manure, litter, or process wastewater to other persons, large CAFOs must provide the recipient of the manure, litter, or process wastewater with the most current nutrient analysis. The analysis provided must be consistent with the requirements of 40 CFR Part 412 (July 1, 2003 edition). Large CAFOs must retain, for a period of five years, records of the recipient name and

address and the date and approximate amount of manure, litter, or process wastewater transferred to another person;

- (iv) annual reporting requirements. The permittee shall submit an annual report to the department. The annual report must include:
- (A) the number and type of animals, whether in open confinement or housed under roof including beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, yeal calves, sheep and lambs, horses, ducks, turkeys, other;
- (B) estimated amount of total manure, litter, and process wastewater generated by the CAFO in the previous 12 months (tons/qallons);
- (C) estimated amount of total manure, litter, and process wastewater transferred to other persons by the CAFO in the previous 12 months (tons/qallons);
- (D) total number of acres for land application covered by the nutrient management plan developed in accordance with (1)(c)(i);
- (E) total number of acres under control of the CAFO that were used for land application of manure, litter, and process wastewater in the previous 12 months;
- (F) summary of all manure, litter, and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume; and
- (G) a statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner; and
- (d) the design, monitoring, recordkeeping, reporting, and specifications for concentrated animal feeding operations must be prepared in accordance and comply with the criteria set forth with the technical standards for nutrient management, and effluent limit guidelines established in 40 CFR Part 412 and department Circular DEQ 9, "Montana Technical Standards for Concentrated Animal Feeding Operations," 2004 edition.
- (3) (2) The board hereby adopts and incorporates herein by reference 40 CFR 122.44(f), which is a federal agency rule setting forth "notification levels" for dischargers of pollutants that may be inserted in a permit upon a petition from the permittee or upon the initiative of the department and 40 CFR Part 412 (July 1, 2003 edition), which establishes the effluent limitation guidelines and best management practices for CAFOs, and department Circular DEQ 9, "Montana Technical Standards for Concentrated Animal Feeding Operations," 2004 edition. See ARM 17.30.1303 for complete additional information about all materials incorporated by reference. All material which is incorporated by reference may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-401, MCA

 $\underline{\text{REASON:}}$  The above changes adopt the CAFO permit requirements as listed in the revised federal regulations. These revised regulations require any permit issued to a CAFO to include: requirements to develop and implement a nutrient management plan; recordkeeping requirements; requirements relating to the transfer of manure or process wastewater to other persons; and annual reporting requirements. By including these requirements in each permit, the CAFO will be able to demonstrate that waste generated at the facility is properly managed and disposed. In addition, the revised federal regulations require the state to establish technical standards for nutrient management. Title 40, Part 412 of the Code of Federal Regulations, adopted by reference, requires large dairy cow, cattle, swine, poultry, and veal calf CAFOs to develop nutrient management plans in accordance with the state's technical standards for nutrient management. These technical standards have been established in Department Circular DEO 9 as These regulations allow the state to described below. complement the EPA/USDA unified strategy to protect water quality and public health.

The proposed renumbering of the rule is necessary to meet Secretary of State formatting standards.

"Must" is changed to "shall" in several places throughout this rule. These are nonsubstantive amendments, which are necessary to standardize the terms used for mandatory requirements in administrative rules.

### ADOPTION OF DEPARTMENT CIRCULAR DEQ 9

Department Circular DEQ 9, which is incorporated by reference in the amendments to ARM 17.30.1343, has been developed in order to establish technical standards for concentrated animal feeding operations. This circular not only establishes the technical standards for nutrient management as required in 40 CFR Part 123.36 (July 1, 2003 edition), but it also provides: design criteria for animal waste management systems; a method for calculating waste production; nutrient management plan requirements; best management practices to be implemented at all CAFOs; a description of appropriate methods to sample waste and soil; methods for calibrating land application equipment; and an outline of the recordkeeping requirements for CAFOs. This circular is intended not only to establish the state's technical standards for CAFOs, but also to provide useful information to producers so that they may more easily comply with the revised regulations.

## Section 1: Animal Waste Management System Design

This section of the circular outlines the design criteria that must be considered for animal waste management systems and lists the information that must be submitted to the Department for review. Title 40, Part 412, of the Code of Federal Regulations (July 1, 2003 edition) specifies the effluent limitations applicable to large horse, sheep, dairy cow, cattle,

veal calf, swine, and poultry CAFOs. These effluent limitations state that discharges are only allowed whenever a precipitation event causes an overflow from a facility that is properly designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event. Large swine, poultry, and veal calf operations designed and built after April 14, 2003, are not allowed to discharge except as the result of an upset or bypass, and must have waste control facilities designed to contain all process-generated wastewaters plus the runoff and direct precipitation from a 100-year, 24-hour rainfall event.

While the revised federal regulations do not state any specific design criteria for animal waste management systems, these regulations do specify that systems must be properly designed, constructed, operated, and maintained. EPA guidance states that the design volume of the waste storage structures should reflect: the maximum length of time before emptying; all accumulated during the storage period; precipitation and evaporation during the storage period; normal runoff during the storage period; direct precipitation from a 25-year, 24-hour rainfall event (or 100-year, 24-hour rainfall event for large swine, poultry, and veal calf operations designed and built after April 14, 2003); runoff from a 25-year, 24-hour rainfall event (or 100-year, 24-hour storm event for new swine, poultry, and veal calf operations); residual solids after liquid has been removed; necessary freeboard to maintain storage integrity; and minimum treatment loading, if applicable.

In order to provide clarity to producers as to what constitutes a properly designed animal waste management system, the Department has compiled a list of applicable design criteria. These design criteria are based on other states' standards, NRCS standards, and DEQ Circular 2, Design Standards for Wastewater Facilities. Additionally, EPA's Economic Analysis of the Final Revisions to the National Pollutant Discharge Elimination System Regulation and Effluent Guidelines for Concentrated Animal Feeding Operations, December 2002, was consulted. The Department has included a provision to allow deviations from the proposed design criteria pending the formal public notice procedures necessary to obtain an MPDES permit, so that site-specific factors can be addressed if necessary.

Given the degree of technical knowledge required to properly design a waste management system, the Department will require the submittal of plans and specifications prepared by an individual qualified to design animal waste management systems. Additional supporting design information; a certification statement stating the animal waste management system was constructed as designed; and an operation and maintenance plan will also be required to be submitted. This information will be used to evaluate a facility's ability to comply with the applicable effluent limitations. This information will allow the Department to fully implement the CAFO regulations so that water quality is protected.

# Section 2: Calculating Waste Production

This section of the circular outlines an acceptable method for calculating waste production. This section is provided in order to assist producers in determining an estimate of the amount of waste generated on-site. An estimate of generated waste is required to be reported in any MPDES permit application submitted for a CAFO. In addition, design considerations must be made to account for the amount of waste produced, stored, and land-applied by the CAFO. It is not required that producers use the listed method in calculating waste production as this section is included for informational purposes only so that producers can more easily comply with the revised CAFO regulations.

## Section 3: Nutrient Management Plan

This section of the circular outlines the necessary elements for a nutrient management plan, as required in the proposed amendments to ARM 17.30.1343. Information showing the deadlines for the development and implementation of a nutrient management plan, as well as information detailing how often the plan must be updated is included. A nutrient management plan was identified in the EPA/USDA unified strategy as a strategy to protect water quality and public health.

### Section 4: Best Management Practices

This section of the circular describes the best management practices that must be implemented at all CAFOs as required in the proposed ARM 17.30.1343. Best management practices listed in this section incorporate the requirements specified in the revised federal regulations, as well as establish necessary controls to prevent discharges of pollutants to state waters. Some examples of the best management practices to be implemented at CAFOs include maintenance of a buffer zone between any downgradient surface waters and land application site(s); restrictions for land applying waste at or below agronomic rates; appropriate disposal methods for on-site chemicals and animal mortalities; and requirements to prevent animals from contacting state waters. These best management practices are expected to protect water quality and public health by preventing discharges of pollutants to state waters from both the production area and the land application area(s).

### Section 5: Sample Collection and Calibration Procedures

This section of the circular describes some of the sampling requirements for waste and land application sites. Testing frequency, testing parameters, and appropriate sample methods are explained. In addition, information on acceptable methods for calibrating land application equipment is provided in order to assist producers. This section is intended to outline the requirements for the frequency of sample collection, as well as

provide information on proper sample collection and equipment calibration methods. This section is included so that producers can more easily comply with the revised CAFO regulations.

## Section 6: Technical Standards for Nutrient Management

This section of the circular outlines the state's technical standards for nutrient management. This section describes acceptable methods for: conducting a field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters; estimating the expected crop yield for each field; determining the appropriate nutrient needs of the crop; and conducting a nutrient budget in order to determine land application rates. This section incorporates the Fertilizer Guidelines for Montana Crops published by Montana State University (Publication # EB161) and the Phosphorus Index Assessment for Montana developed by the Natural Resources Conservation Services (NRCS). Additionally, the use of NRCS Standards 590 (Nutrient Management) and 633 (Waste Utilization) have been adopted.

This section of the circular has been developed in accordance with the revised federal regulations. These revised federal regulations require that: a field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters be included; the form, source, amount, timing, and method of application of nutrients on fields be considered; appropriate flexibilities for any CAFO to implement multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff be included; manure is sampled and analyzed annually for nitrogen and phosphorus content; soil is sampled and analyzed a minimum of once every five years for phosphorus content; land application equipment is inspected periodically for leaks; and setback requirements to down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters are maintained. These standards have been developed to address the required elements. It is expected that nutrient management plans developed in accordance with the state's technical standards will protect water quality and public health by minimizing the pollutants discharged from land application site(s).

### Section 7: Recordkeeping Requirements

This section of the circular outlines the required recordkeeping for CAFOs, as listed in the proposed amendments to ARM 17.30.1343. This section is provided in order to assist producers with complying with the revised CAFO regulations. Only those records required to be maintained as specified in the revised federal regulations have been included. These recordkeeping requirements have been established to ensure that producers conduct routine visual inspections of various elements of their operation. By detecting and correcting any deficiencies noted during these routine inspections, it is

expected that discharges outside of precipitation events will be minimized.

- 4. Concerned persons may submit their data, views or arguments, either orally or in writing, at the hearing. Written data, views or arguments may also be submitted to the Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620-0901, faxed to (406) 444-4386 or emailed to the Board Secretary at ber@state.mt.us and must be received no later than 5:00 p.m., February 4, 2005. To be guaranteed consideration, mailed comments must be postmarked on or before that date.
- 5. Thomas Bowe, attorney for the Board, has been designated to preside over and conduct the hearing.
- 6. The Board maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Such written request may be mailed or delivered to the Board of Environmental Review, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, emailed to the Board Secretary at ber@state.mt.us, or may be made by completing a request form at any rules hearing held by the Board.
- 7. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

<u>James M. Madden</u>

JAMES M. MADDEN

Rule Reviewer

By: <u>Joseph W. Russell</u>

JOSEPH W. RUSSELL, M.P.H.,

Chairman

Certified to the Secretary of State December 6, 2004.